

Proposed Surface Water/Sediment Sampling Strategy

For migration mechanisms from the sources of contamination to the surface water and sediment, please see the CSM diagram. For locations of the confluences, the ponds proposed for sampling, and locations where samples are proposed to characterize upstream conditions, please refer to the sketch attached. No upstream conditions will be evaluated for the short tributary to the northeast as it appears that its entire length could be impacted by Wilcox activities.

All samples will be collected moving upstream from Sand Creek and the East Tributary starting at Confluence 1. Samples will be collected from the intermittent stream crossing the site starting from Confluence 2 and from the short intermittent stream in the northeast corner from Confluence 3. This manner of sampling will ensure that the water and sediment at the upstream sampling locations are not disturbed due to collection activities on-going downstream.

One collocated surface water and sediment sample pair will be collected from each location. The streams show a pattern of riffle/run/bar, so the deposition and thus higher contamination is anticipated to be present within the bar portion of the stream bed. For this reason, the sand bars are the locations where samples are proposed to be collected. Depending on the time of year when sampling is performed, if water is not running in the intermittent streams, standing water and sediment will be collected from stagnant pools. If no standing water is present, only sediment samples will be collected.

For planning purposes, a surface water/sediment sample pair is planned to be collected from sand bars approximately every 200 ft.

Pairs of surface water/sediment samples will also be collected from the ponds that are located in areas where they could receive runoff or seeping groundwater, or if they are located in areas where historically, waste may have been disposed of. Depending on the size of the pond, 2-4 sample pairs will be collected. If a pond is located along a stream, then one sample pair will be collected at the entry of the stream into the pond and one at its exit.

We know that when they were building the 8th street bridge a black-oil like substance was encountered when the footings were placed. The estimated depth was 2-3 ft. On the south side of the bridge, the bank looks to have a non-native material present. Should we consider hand-auger techniques along the banks to look for visual waste to a depth of 2-3ft?

Is there a need for background/reference? The pond to the northeast may meet these criteria.

If the confluence 1 area is hot, is there a plan/strategy for moving downgradient?

Commented [KC1]: Is there a separate plan/strategy to investigate groundwater discharge or seep discharge to the creek?

The CSM was not attached.

Commented [KC2]: I am not certain where this is located. There is one short trip to the northwest. Should this reference the 'northwest' rather than the 'northeast'?

Deleted: Sandy

Commented [KC3]: The figure shows the upgradient sample being collected just north of the road. The triangle property to the west is part of the site. The upgradient sample should be taken further north. Please refer to the figure for comments.

Commented [D4]: There are additional confluence locations slightly upstream and downstream of confluence 2. Those locations have been GPSd. I will mark approximate locations on the provided map.

Commented [KC5]: I assume these are 0-6in samples.

Commented [KC6]: What is the estimated number of samples this provides for each creek: Sand, East Trib, Process Trib?

Commented [KC7]: There are a few ponds missing from the figure. Please refer to the figure for comments.

Commented [KC8]: What is the size cut for this determination?

Commented [KC9]: If the entry sample is hot, is there a 'next step' for delineating the extent?